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electronic engraving machine for engraving printing cylinders for gravure printing. An engraving signal for actuating an engraving stylus of an engraving member is acquired from engraving values representing desired tone values and a periodic vibration signal in an engraving amplifier that can be adjusted by signal values for generating an engraving raster. With the engraving stylus, cells are engraved into the printing cylinder, the actual dimensions of the cells representing engraved actual tone values. Transmission functions are calculated which reproduce relationships between variations, which are adjusted at the engraving amplifier, of the signal values, and the resulting variations of the geometric actual dimensions of the engraved cells. Signal values for modifying at least one parameter "vibration", "light", "depth", or "medium gradation" are set at the engraving amplifier. With the signal values, test cells are engraved for predetermined desired tone values, and their geometric actual dimensions are measured. Difference values are calculated from the actual dimensions and the desired dimensions of the cells upon consideration of the transmission functions. The signal values are corrected by adding the difference values. The steps of setting the signal values through correcting the signal values are repeated using the corrected signal values until the actual dimensions of the cells are at least within a tolerance range about the desired dimensions. To shorten the calibration time, in each sequence of the steps from setting the signal values through the correcting of the

signal values, the actual dimensions of the cells are compared to the desired dimensions. If the actual dimensions are outside the tolerance range, transmission functions are recalculated. The difference values are computed upon consideration of the recalculated transmission functions. The signal values are corrected using the new difference values.--

On page 2, delete lines 26<sup>2</sup> and 27<sup>2</sup> insert the following heading:

7.5.

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**--BRIEF DESCRIPTION OF THE DRAWING**

The drawing figure is a block diagram of a preferred embodiment of the electronic engraving machine of the invention.

**DESCRIPTION OF THE PREFERRED EMBODIMENTS--.**

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On page 3, at line 5, before "cutting" insert

--a--.

On page 3, at lines 3-9, delete "( )".

On page 3, at line 11, delete "( )".

On page 3, at lines 13 and 14, delete "( )".

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On page 3, at line 18, delete "( )".

On page 3, at lines 22-24, delete "( )".

On page 3, at line 28, delete "( )".

On page 4, at lines 1-5, delete "( )".

On page 4, at line 6, delete "(14)'" and substitute

25

--14--.

On page 4, at lines 7-11, delete "( )".

On page 4, at line 17, delete "( )".

On page 4, at lines 19-21, delete "( )".

On page 4, at line 21, delete "out".

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On page 4, at lines 23-27, delete "( )".

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On page 4, at the last line, delete "( )".

On page 5, at lines 1 and 2, delete "( )".

On page 5, at line 5, delete "( )".

On page 5, at line 6, delete "so".

5 On page 5, at line 7, before "that" insert  
--so--.

On page 5, at lines 7 and 8, delete "( )".

On page 5, at line 13, delete "inventive", after  
"calibration" insert --of the invention--.

10 On page 5, at line 14, delete "consists of" and  
substitute --comprises--.

On page 5, at line 15, delete "consist" and  
substitute --comprises--.

15 On page 6, at line 4, delete "inputted" and  
substitute --input--.

On page 6, at line 5, delete "whereby" and  
substitute --where--.

On page 6, at line 15, delete "inputted" and  
substitute --input--.

20 On page 6, at line 16, delete "fetches" and  
substitute --calls--.

On page 6, at line 21, delete "fetched" and  
substitute --called--.

On page 6, at line 22, delete "( )".

25 On page 6, at line 23, delete "(30)" and substitute  
--30--.

On page 6, at line 24, delete "( )".

On page 6, at line 25, delete "( )".

30 On page 6, second line from the bottom, delete  
"( )".

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On page 6, the last line, delete "( )".

On page 7, at lines 2-4, delete "( )".

On page 8, at line 3, delete "relations" and substitute --relationships--.

5 On page 8, at line 9, delete "relation" and substitute --relationship--.

On page 8, at line 27, delete "relation" and substitute --relationship--.

10 On page 9, at lines 2, 4 and 6, delete "relations" and substitute --relationships--.

On page 9, at line 11, delete "( )".

On page 9, at line 11, before "stored" insert --are--.

15 On page 9, at line 14, delete "[E] [sic]" and substitute --[F]--, insert --,-- before "a".

On page 9, at line 19, delete "relation" and substitute --relationship--.

On page 9, second to the last line, delete "( )".

20 On page 10, at lines 2, 8 and 11, delete "fictive" and substitute --fictional--.

On page 10, at line 23, delete "( )".

On page 10, at line 26, delete "fictive" and substitute --fictional--.

25 On page 11, at line 2, delete "fictive" and substitute --fictional--.

On page 11, at line 17, delete "( )".

On page 11, at line 20, delete "fictive" and substitute --fictional--.

30 On page 11, at line 27, delete "fictive" and substitute --fictional--.

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On page 12, at line 1, delete "fictive" and substitute --fictional--.

On page 12, at line 13, delete "( )".

5 On page 12, at line 19, delete "as an advantageous development".

On page 12, at line 22, delete "is [sic]" and substitute --are--.

On page 13, as the last paragraph, insert the following paragraph:

10 --Although various minor changes and modifications might be proposed by those skilled in the art, it will be understood that my wish is to include within the claims of the patent warranted hereon all such changes and modifications as reasonably come within my contribution  
15 to the art.--

**IN THE ABSTRACT:**

Please add the following new Abstract:

20 --In a method for calibrating an engraving amplifier in an electronic engraving machine, whereby a vibration signal is used to control the engraving of an engraving element by using engraving tone values representing desired tone values ranging from "light" to "dark", small cup shapes are engraved. The dimensions of the cup shapes define the real tone values. Transmission  
25 functions are initially determined, reproducing correlations between signal values that are adjusted in the engraving amplifier and the resulting changes in the real dimensions of the cup shapes. Sample cup shapes are engraved for predetermined desired tone values using the

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